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| EXAMINER | |
|---|---|
| VIDA, MELANIE M | |
| **ART UNIT** | **PAPER NUMBER** |
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Please find below and/or attached an Office communication concerning this application or proceeding.

hV

| **Office Action Summary** | **Application No.**<br>09/384,585 | **Applicant(s)**<br>YAMAZAKI, YOSHIROU | |
|---|---|---|---|
| | **Examiner**<br>Melanie M Vida | **Art Unit**<br>2626 | |

***-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

JEROME GRANT II
PRIMARY EXAMINER

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. This action is responsive to an amendment filed 2/9/04. Claims 1-24 are pending.

### *Response to Arguments*

2. Applicants arguments with respect to claims 1, 8, 9, 15 have been considered, but are moot in view of the new ground(s) of rejection. In view of Applicant's remarks, it is agreed that Terashita may not be relied upon to keep historical information for image processing. Thus a new ground of rejection of Kojima et al. US-PAT-NO: 6,233,066 B1 is applied below.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

**Claims 1-3, 6-8, 13, 15-16** are rejected under 35 U.S.C. 102(e) as being anticipated by Kojima et al. US-PAT-NO: 6,233,066 B1, (hereinafter, Kojima).

Regarding, **claim 1,** Kojima, as shown in figure 1, illustrates the first embodiment of an image processing apparatus, which reads on "an image-processing apparatus comprising:" (col. 11, lines 56-58). Moreover, Kojima teaches of an image input portion (10), which reads on "reading means" that reads an image on an original, which reads on "for reading an image recorded on a recording material", (col. 11, lines 58-60). Kojima, as shown in figures 5-6, illustrates that an image on an original is currently scanned, which reads on "for reading an image recorded on a recording material", and acquires density data $\mathbf{D_b}$ between the points E-F and C-D, which reads on "and obtaining a current image characteristic data of the image" (col. 11, lines 60-64; col. 15, lines 26-28; col. 15, lines 64-67; col. 16, lines 22-26).
Furthermore, a density difference detection circuit (8), which reads on "acquisition means" acquires storage data (64) in a first memory (65) at a previous scanning time and includes the density data, $\mathbf{D_a}$, from a previous scanning for an image recorded between points A-B and C-D, which reads on "for acquiring a former image characteristic data which, was obtained based on a result of a reading of the image and stored in storage means in a previous image processing session;" (col. 12, lines 1-3; and col. 12, lines 10-12).
A density difference detection circuit (8), which reads on "calculation means" calculates based on an overlapping reading/scanning area E-G-F, as shown in figure 6, between a former reading of image characteristic data between the points A-B and C-D, stored in memory, and the current

reading, between points E-F and C-D, which reads on "which calculates, based on the current image characteristic data and the former image characteristic data", a density correction signal (801) $\Delta D_{offset}$, which reads on, "a correction parameter", (col. 12, lines 6-14).

A composite image can be obtained by applying the density difference $\Delta D_{offset}$ in the overlapping scanning area (E-G and C-D) to correct the image data (400) (E-F and C-D) that overlaps the previous image area (A-B and C-D), which reads on "for correcting image quality deterioration of the image; and", (col. 16, lines 27-34).

The density correction circuit (9), which reads on "correction means" corrects the image data (400) in accordance with a correction amount of the density correction signal (801) $\Delta D_{offset}$, which reads on "which corrects, based on the correction parameter calculated by said calculation means, the image data." (col. 12, lines 14-18; col. 16, lines 35-38).

Regarding, **claim 2,** Kojima, as shown in figure 1, illustrates the first embodiment of an image processing apparatus, which reads on "an image-processing apparatus comprising:" (col. 11, lines 56-58). Moreover, Kojima teaches of an image input portion (10), which reads on "reading means" that reads an image on an original, which reads on "for reading an image recorded on a recording material", (col. 11, lines 58-60). Kojima, as shown in figures 5-6, illustrates that an image is read between the points E-F and C-D, which reads on "for reading an image recorded on a recording material", and acquires density data $D_b$, which reads on "and obtaining current image data of the image" (col. 11, lines 60-64; col. 15, lines 26-28; col. 15, lines 64-67; col. 16, lines 22-26).

Furthermore, a density difference detection circuit (8), which reads on "acquisition means" acquires storage data (64) in a first memory (65) at a previous scanning time and includes the

density data, $\mathbf{D_a}$, from a previous scanning for an image recorded between points A-B and C-D, which reads on "for acquiring a former image characteristic data which was obtained based on a result of a reading of the image in a previous image processing session and acquiring information for specifying former reading conditions of the previous image processing section, the former image characteristic data and the former reading conditions being stored in storage means during the previous image processing session," (col. 12, lines 1-3; and col. 12, lines 10-12).

A density difference detection circuit (8), which reads on "calculation means" compares the storage data (64) having already been stored in the first memory (65) at a previous scanning time, which reads on "which, based on the former reading conditions" converts this data to match the current scanning area data to form a composite image, which reads on "converts the current image data so that the converted data is substantially equal to an image data", (col. 16, lines 27-34). Furthermore, this correction corrects the problem wherein the main body of the hand-held scanner cannot be held at a constant angle during operation of the former scan and current scan, and this causes the amount of light to change that is reflected by the original, which reads on " that would have been obtained by reading the image under the former reading conditions, and thereafter", (col. 15, lines 58-63). $\mathbf{\Delta D_{offset}}$, which reads on "obtains a current image characteristic data from the converted image data, and based on both the current and former image characteristic data, calculates a correction parameter for correcting image quality deterioration of the image; and", (col. 12, lines 6-14; col. 16, lines 19-35).

A density correction circuit (9), which reads on "correction means" corrects the density difference between the overlapping scanning area, CDGE, can be eliminated by correcting the image data (400) on one line obtained during the new scanning to obtain a composite image

having no density difference even at the overlapping scanning area (i.e. CDGE), which reads on "which corrects, based on the correction parameter calculated by said calculation means, the image data", (col. 12, lines 14-18; col. 16, lines 35-38).

Regarding, **claim 3,** Kojima, as shown in figure 33, a plot showing how an output signal is effected by a change in the inclination of the scanner during scanning of an image on an original having a constant density at a plurality of sampling points, which reads on "wherein the reading conditions include at least one of an image reading position on the recording material, a spectral sensitivity of said reading means used for reading, and a resolution at which an image is read", (col. 1, lines 53-67).

Regarding, **claims 6-7,** Kojima, as shown in figures 5-6, teach that the density difference between the former reading is obtained by the block A-B to C-D and the current reading in the block E-F and C-D to correct for the density difference in an overlapping region, E-G to C-D, which reads on "wherein the image characteristic data is data which represents a predetermined image characteristic amount for each of a fixed number of blocks into which an image is divided, and said calculation means compares image characteristic data obtained from the image data and image characteristic data acquired by said acquisition means for each of the blocks and calculates the correction parameter for each of the blocks", (col. 15, lines 26-col. 16, lines 1-39).

Regarding, **claims 8,** please refer to the corresponding rejection in claims 1-2, and further wherein Kojima recites that the density difference detection circuit (8) detects an overlapping reading/scanning area by using a scanning flag (62) stored in second memory (66), which reads on "determining whether or not the image has been read in a previous image processing state", (col. 12, lines 6-8; col. 16, lines 60-67).

**-9,** please refer to the corresponding rejection in claims 1-2, respectively.

Regarding, **claims 13,** please refer to the corresponding rejection in claims 6-7.

Regarding, **claim 15,** please refer to the corresponding rejection in claims 1 or 2.

Regarding, **claim 16,** please refer to the corresponding rejection in claims 3, and 6-7.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 4-5, 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. US-PAT-NO: 6,233,066 B1 as applied to claims 1-2, 8-9, and further in view of Oota et al. US-PAT-NO: 4,532,558, (hereinafter, Oota).

Regarding, **claims 4-5,** Kojima teaches the image processing apparatus according to claim 1, but fails to expressly disclose, "the recording material is a photographic film" "and the storage means is any one of a semiconductor memory mounted to a cartridge in which the photographic film is accommodates, and a magnetic recording layer formed with a magnetic material being applied to the photographic film".

However, Oota teaches in the background of the invention, of recording a still photograph on a recoding medium such as a silver salt film as medium, which reads on "wherein the recording material is a photographic film", (col. 1, lines 10-12). Moreover, Oota, as shown in figure 2, teaches of storing a signal recorded by a recording head (11) on a magnetic sheet (1) the

photographic frames such as in storage employing a semiconductor memory, which reads on "and the storage means is anyone of a semiconductor memory mounted to a cartridge in which the photographic film is accommodated and a magnetic recording layer formed with a magnetic material being applied to the photographic film", (col. 4, lines 7-10; col. 7, lines 25-30).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Kojima's image processing apparatus (i.e. claims 1 or 2) with Oota's recording material, storage means, and magnetic recording layer.

One of ordinary skill in the art would have been motivated to use Oota's recording material, storage means, and magnetic recording layer because a semiconductor memory has a memory capacity of a plurality of frames, and further because the quality of the photographing can be determined by means of simple processings in a considerably short period of time as compared with the case where the recording is effected by means of a silver salt film (i.e. photographic film), given the express suggestion of Oota, (col. 1, lines 10-12; col. 1, lines 35-40; col. 7, lines 28-20).

Regarding, **claims 11-12,** please refer to the corresponding rejection in claims 4-5, above.

6. **Claims 9-10, 14, 17-18, 21-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. US-PAT-NO: 6,233,066 B1, (hereinafter, Kojima).

Regarding, **claim 9,** Kojima, as shown in figure 1, illustrates the first embodiment of an image processing apparatus for correcting the density error of a previously stored image and a currently scanned image, which reads on "an image correcting method comprising the steps of::" (col. 11, lines 56-58). Moreover, Kojima teaches of an image input portion (10) that reads an

image on an original, which reads on "effecting a first reading for an image recorded on a recording material in a first image processing session", (col. 11, lines 58-60). Kojima, as shown in figures 5-6, illustrates that the recorded image is scanned between the points A-B and C-D, which reads on "obtaining a first image characteristic data based on a result of the first reading; and" (col. 11, lines 60-64; col. 15, lines 26-28; col. 15, lines 64-67; col. 16, lines 22-26). The data resulting from the reading is stored in first memory (65), which reads on "storing, in storage means, the obtained first image characteristic data", (col. 12, lines 1-5). Moreover, Kojima teaches of an image input portion (10), which reads on "when a second reading is effected" that reads an image on an original between the points E-F and C-D, which reads on "for reading an image recorded on a recording material in a second image processing session, based on the information for specifying reading conditions in the first reading", (col. 11, lines 58-60). As illustrated in figure 6, the new scanning is corrected by a density difference to obtain the previous scanning density for correcting an overlapping area between points F-G, which reads on "converting the image data obtained by the second reading", (see figure 6). This density difference between a previous scanning and at a time of new scanning is corrected when there is a discontinuity in an overlap region of the image, that is caused by a change in the light reflected by the original when there is a change in the inclination of the main body of the hand-held scanner, which reads on "so that the image data becomes substantially equal to data that would have been obtained by reading the image under similar conditions substantially equal to conditions specified in the first information", (col. 15, lines 58-67; col. 16, lines 39-42). A density difference detection circuit (8) calculates based on an overlapping reading/scanning area E-G-F, as shown in figure 6, between a former reading of image characteristic data between

the points A-B and C-D, stored in memory, and the current reading, between points E-F and C-D, which reads on "based on both first and second image characteristic data", a density correction signal (801) $\Delta D_{offset}$, which reads on, "calculating a correction parameter", (col. 12, lines 6-14). The density differences in the region of a connection portion is prevented to improve the image quality, which reads on "for correcting image quality deterioration of the image; and", (col. 20, lines 18-23). A composite image can be obtained by applying the density difference $\Delta D_{offset}$ in the overlapping scanning area (E-G and C-D) to correct the image data (400) (E-F and C-D) that overlaps the previous image area (A-B and C-D), which reads on "for correcting image quality based on the calculated correction parameter", (col. 16, lines 27-34).

Kojima in the first embodiment does not expressly disclose, storing, in storage means, the obtained first image characteristic data together with a first information for specifying reading conditions in the first reading" or "obtaining a second image characteristic data from the converted image data;" (col. 11, lines 60-64; col. 15, lines 26-28; col. 15, lines 64-67; col. 16, lines 22-26).

However, Kojima in embodiment 3 teaches, that data is processed according to a photo or text mode that is designated as a processing mode by the photo/text setting circuit (30), which reads on "together with a first information for specifying reading conditions in the first reading", (col. 22, lines 35-40). Additionally, Kojima teaches in embodiment 7, that if the density correction value is in a range of when an amplifier circuit functions normally then the a resulting image can be stored in image memory (6), which reads on ""obtaining a second image characteristic data from the converted image data;" (col. 26, lines 40-col. 27, lines 7).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Kojima's image correction method in embodiment 1 with Kojima's method of specifying a reading condition in text/photo mode, in embodiment 3.

One of ordinary skill in the art would have been motivated to combine embodiment 1 with embodiment 3 in order to improve the quality of the image, given the express suggestion of Kojima, (col. 22, lines 30-33).

Regarding, **claim 10,** please refer to the corresponding rejection in claim 3.

Regarding, **claim 14,** Kojima, as shown in figures 5-6, teach that the density difference between the former reading is obtained by the block A-B to C-D and the current reading in the block E-F and C-D to correct for the density difference in an overlapping region, E-G to C-D, which reads on "wherein the image characteristic data is data which represents a predetermined image characteristic amount for each of a fixed number of blocks into which an image is divided, and said calculation means compares image characteristic data obtained from the image data and image characteristic data acquired by said acquisition means for each of the blocks and calculates the correction parameter for each of the blocks", (col. 15, lines 26-col. 16, lines 1-39).

Regarding, **claim 17,** Kojima teaches the method of claim 16, but fails to expressly disclose in embodiment 1, "the block characteristics data includes at least one of average densities of color components within the block, color densities of a pixel determined to be a high light point of the block, and color densities of a pixel determined to be a shadow point of the block."

However, Kojima teaches in embodiment ten, that the density correction circuit (9) corrects the color image data (400a) (400b) (400c) for colors in an overlapping region, as shown in figure 5, by obtaining an average of the obtained density differences used as a correction amount, which reads on "the block characteristics data includes at least one of average densities of color components within the block, color densities of a pixel determined to be a high light point of the block, and color densities of a pixel determined to be a shadow point of the block.", (col. 31, lines 50-65; col. 34, lines 7-11).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Kojima's image processing apparatus (i.e. claim 16) with an average density of color components in an overlapping region (i.e. block).

One of ordinary skill in the art would have been motivated to average density color components in a block, in order to reduce an uneven amount of gray levels in an overlapping region, given the express suggestion of Kojima, (col. 34, lines 7-11).

Regarding, **claim 18,** Kojima teaches the method of claim 16. Kojima further teaches the density difference is detected using the image data for colors read by the scanner, and the storage data for colors having been stored in first memory (65), during a previous scanning, which reads on "compensating for differences between the initial imaging conditions and current imaging conditions", (col. 20, lines 9-17).

Kojima in embodiment 1 does not expressly disclose the determining step or the correcting step, a result of the determining step, as recited in claim 18.

However, Kojima teaches in embodiment 2, that if a density correction amount exceeds a predetermined amount then the image data is judged to be abnormal and will not be further

processed, which reads on "determining whether a correction of the current image data is required based on a result of the compensating step;" (col. 20, lines 55-65). If the image data is not judged to be abnormal then the image processing then the method of embodiment 1 is carried out, which reads on "correcting the current image data based on a result of the determining step", (col. 20, lines 35-42 and lines 55-65).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify Kojima's first embodiment with the second embodiment.

One of ordinary skill in the art would have been motivated to determine whether a correction of the current image data is required based on a result of the compensating step; and correcting the current image data based on a result of the determining step, in order that the image quality is not lowered as a result of processing an abnormal image, given the express suggestion of Kojima, (col. 20, lines 65-67 through col. 21, lines 1-6).

Regarding, **claim 21,** Kojima teaches that density difference is obtained on each scanning line and used for density correction, which reads on "the step of determining whether a correction of the current image data is required comprises:" (col. 16, lines 43-44). Furthermore, density difference may be detected for a plurality of lines, every four or eight lines for example, so that the density difference on more lines can be corrected by a single process, which reads on "dividing the current image data into a plurality of blocks", (col. 16, lines 44-48). Kojima teaches that the density $\mathbf{D_a}$ is determined for a current reading, which reads on "determining a plurality of current block characteristics data for each block of the current image data;" (col. 16, lines 24-26). For each region, the density difference between the image data stored in memory $\mathbf{D_b}$ based on a former reading and the current readings **Da**, are calculated, which reads on

"comparing each current block characteristics data with corresponding initiation block characteristics data", (col. 16, lines 19-27). The correction amount **ΔD** is output to a mapping circuit (5), which reads on "outputting a result based on the comparison step", (col. 16, lines 35-39).

Regarding, **claim 22,** Kojima, teaches in embodiment 2, of comparing a density difference to a preset threshold to determine whether or not to continue with the method taught in embodiment 1, that is, to correct the density difference if it is below the threshold, in an overlapping region, which reads on "the outputting step comprises outputting a positive result if at least one current block characteristics data differs from the corresponding initial block characteristics data by a preset value or more", (see claims 1-2 above for embodiment 1, col. 20, lines 35-42).

Regarding, **claim 23,** Kojima teaches that density difference is obtained on each scanning line and used for density correction, which reads on "the correcting step comprises:", (col. 16, lines 43-44). Furthermore, density difference may be detected for a plurality of lines, every four or eight lines for example, so that the density difference on more lines can be corrected by a single process, which reads on "dividing the current image data into a plurality of blocks", (col. 16, lines 44-48). For each region of lines, Kojima teaches that the density $\mathbf{D_a}$ determined for a current reading is compared with the former reading $\mathbf{D_b}$ stored in storage area to obtain a density correction factor $\mathbf{\Delta D_{(a-b)}}$, which reads on "calculating a block correction factor for each block of the current image data based on a difference between the current block characteristics data and the corresponding initiation block characteristic data; and;" (col. 16, lines 24-26). Kojima inherently teaches, "correcting each pixel of each block of the current image data based on the

corresponding block correction factor" as evidenced by figure 6, where the density difference is computed on a pixel position basis, (see figure 76).

7. **Claims 19-20 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. US-PAT-NO: 6,233,066 B1, (hereinafter, Kojima) as applied to claim 18 above, and further in view of Kubo et al (USP 5,828,461; hereinafter Kubo).

Regarding, **claim 19,** Kojima teaches the method of claim 18, but fails to expressly disclose "determining whether the spectral sensitivities of the initial scanner and a current scanner coincide and calculating a spectral sensitivity conversion factor when it is determined that the spectral sensitivities do not coincide; and determining whether an initial reading position of the image on the recording material and a current reading position are different and correcting the current reading position when it is determined that the reading positions are different".

However, Kubo inherently teaches, "determining whether the spectral sensitivities of the initial scanner and a current scanner coincide and calculating a spectral sensitivity conversion factor when it is determined that the spectral sensitivities do not coincide; and determining whether an initial reading position of the image on the recording material and a current reading position are different and correcting the current reading position when it is determined that the reading positions are different", as evidenced by the scanner/original characteristics correcting portion (44) with LUT1 and matrix1 and LUT2 for the image data converting portion (40), as shown in figure 2, and a selection of a scanner type as shown in figure 3.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify Kojima's image processing method with Kubo's compensating step.

One of ordinary skill in the art would have been motivated to have a compensating step in order to convert image data for different scanner types.

Regarding, **claim 20,** Kubo teaches, that an image read from a selected scanner (32) at a low resolution is stored in the conversion data memory (42), which reads on "determining whether an initial resolution", (col. 19, lines 28-35). Further, a user can click on the low resolution displayed in an image display area (68), and the low resolution is displayed in an output display area (69) at a predetermined magnification, which reads on "and a current resolution are different", (col. 19, lines 50-59). Kubo states that setting the magnification of the image within the output frame (69) and selection of a LUT1 through LUT6 and other parameters, the image data can be corrected, which reads on "and calculating a resolution correcting factor when it is determined that the resolutions are different", (col. 19, lines 65 through col. 20, lines 5).

Regarding, **claim 24,** Kubo teaches that the spectral sensitivity distribution of the scanner is corrected by a matrix coefficient matrix (1), by converting the same to a read value in Status M (transmission original) or in Status A (reflection original), which reads on "determining whether the spectral sensitivities of the initial scanner and a current scanner coincide", (col. 13, lines 38-48). Moreover, the print data converting portion (58) performs conversion and incerse conversion using LUT5, LUT6, and the matrix coefficient, matrix (3), and outputs the print density data (f) from the RGB monitor data (g), which reads on "performing an inverse conversion of the corrected image data when it is determine that the spectral sensitivities do not coincide", (col. 18, lines 37-42).

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoo US-PAT-NO: 6,421,146, stores shading data in memory for a previous scan and correct the shading factor based on a comparison of a new scan and the previous scan.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie M Vida whose telephone number is (703) 306-4220. The examiner can normally be reached on 8:30 am 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melanie M Vida
Examiner
Art Unit 2626

JEROME GRANT II
PRIMARY EXAMINER

MMV
mmv

April 24, 2004